



WATER RESOURCES RESEARCH GRANT PROPOSAL

Project ID: 2005TX190B

Title: Evaluation of Standards for Compost Blankets in Stormwater Control

Project Type: Research

Focus Categories: Non Point Pollution, Treatment, Water Quality

Keywords: perchlorate, compost, erosion, stormwater

Start Date: 03/01/2005

End Date: 02/28/2006

Federal Funds: \$4,790

Non-Federal Matching Funds: \$12,634

Congressional District: 17th

Principal Investigators:

Lindsay Birt

Russell Persyn

Texas A&M University System

Abstract

The Texas Department of Transportation has approved of the use of compost as a best management practice to control stormwater during highway construction. The use of compost blankets has the potential to lessen runoff and erosion from construction sites. At the same time, compost blankets also benefit the environment since they are created from recycled waste products and thus constitute a beneficial use. This study will compare how the use of compost runoff and erosion from construction sites where compost blankets are used to controls. The project will also compare how water quality is affected by the use of compost blankets and controls. In this effort, blankets made from wood chips and compost manufactured topsoil, erosion control compost, and general use compost will be tested in field experiments. An indoor rainfall simulator will be utilized to generate runoff and runoff samples will be collected and analyzed. Results of this study will provide useful information highway planners and water resources professionals can apply about the potential to use compost blankets to treat nonpoint pollutants associated with construction and new development.